



Adverse Childhood Life Events and Postpartum Mood Episodes in Bipolar Disorder

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Introduction

Background:

- Women with bipolar disorder (BD) are at particularly high risk of experiencing postnatal depression (PND) and postpartum psychosis (PP).¹
- Severe postpartum mood illness has been shown to have long-term detrimental effects for both the mother and her baby,² therefore research investigating risk factors for postpartum mood episodes in women with BD is of critical importance.
- Adverse childhood life events (ACLEs) have been identified as risk factors for PND,³ however the only study to assess this in relation to PP found no such association.⁴
- This absence of effect may be due to the small heterogeneous sample used or the limited number of ACLEs studied.
- Despite being at high risk there are no studies that have explored ACLEs as risk factors for postpartum mood episodes exclusively in women with BD.

Aim: To explore ACLEs as risk factors for episodes of PND and PP in a large, well characterised sample of women with BD.

Methods

Sample: 655 women recruited into the Bipolar Disorder Research Network (BDRN, BDRN.org) as part of an ongoing large programme of research investigating the genetic and non-genetic determinants of mood disorders. Inclusion criteria: a) met DSM-IV criteria for BD type I (BD-I), b) aged 18 years or over and c) given birth to at least one live baby.

Measures:

- **Adverse childhood life events:**
 - ◊ A bespoke questionnaire assessing the presence/absence of six ACLEs before the age of 16 years, and one open ended question to capture childhood abuse (**Figure 1**).
 - ◊ Childhood abuse before the age of 16 years was rated according to the following categories: a) any abuse (emotional, physical or sexual), b) emotional abuse, c) physical abuse and d) sexual abuse.

Figure 1. Adverse childhood life events questionnaire

'Before the age of 16 years did you experience...'

- | | |
|----------------------------------|---|
| ◊ Death of a parent? | ◊ A serious illness requiring hospitalisation? |
| ◊ Death of friend? | ◊ Anything else that you felt was a significant life event for you? |
| ◊ Death of a sibling? | |
| ◊ Divorce/separation of parents? | |

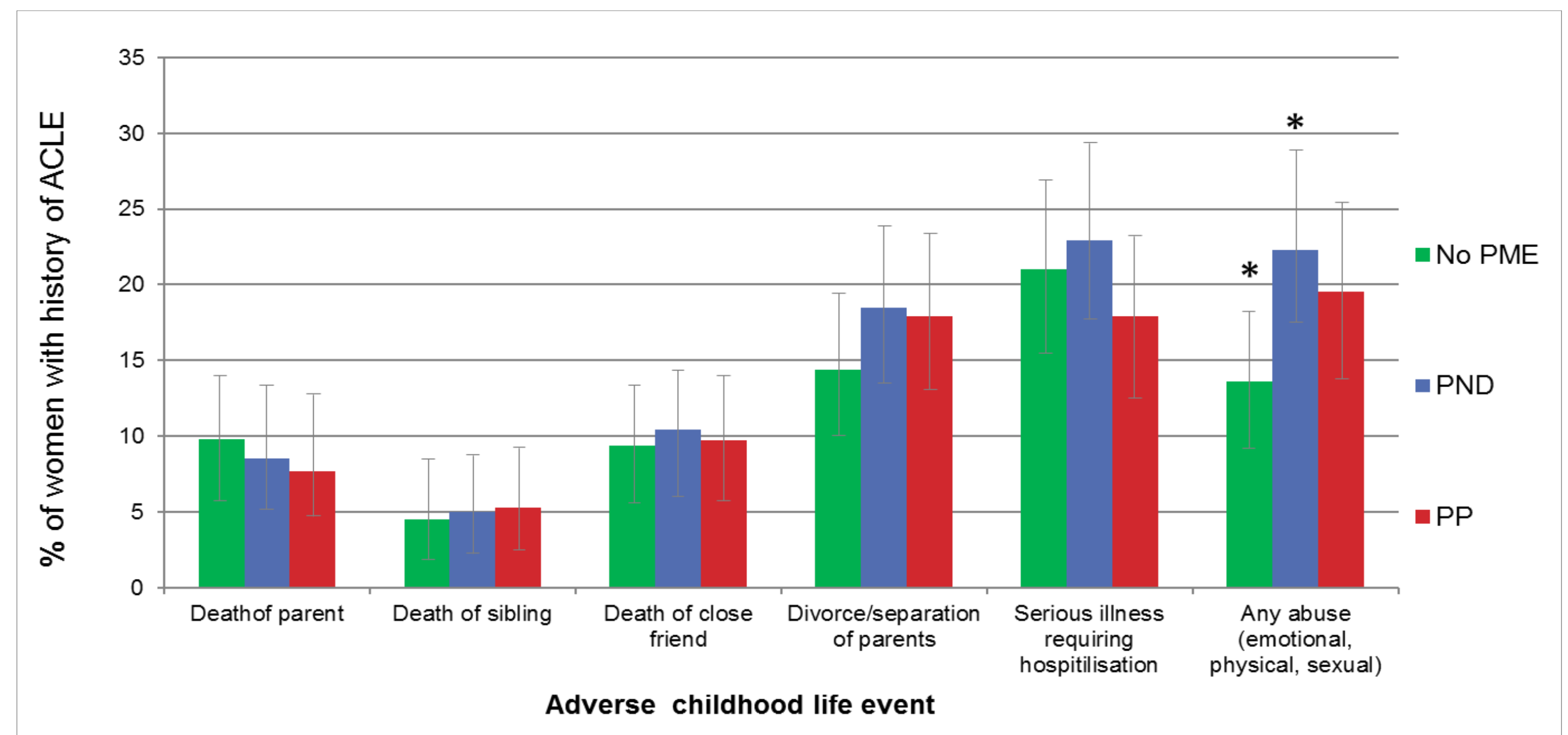
- **Postpartum mood episodes:** Lifetime postpartum psychiatric history was obtained via semi-structured interview and psychiatric case notes. Participants were stratified to the following three groups:
 - ◊ No PME (n=224) defined as no occurrence of a perinatal mood episode despite giving birth to at least one live baby.
 - ◊ PND (n=223) defined as having experienced an episode of depression within 6 weeks of delivery but never having an episode of PP.
 - ◊ PP (n=208) defined as having experienced an episode of mania within 6 weeks of delivery but never having an episode of PND.

Multiparous women who had a lifetime history of episodes of PND and PP were excluded from this analysis.

Statistical analysis: Pearson's chi-square tests compared the prevalence of each ACLE between women in the No PME group and those in the PP or PND group and odds ratios (OR) were calculated. All data was analysed using SPSS version 21.

Results

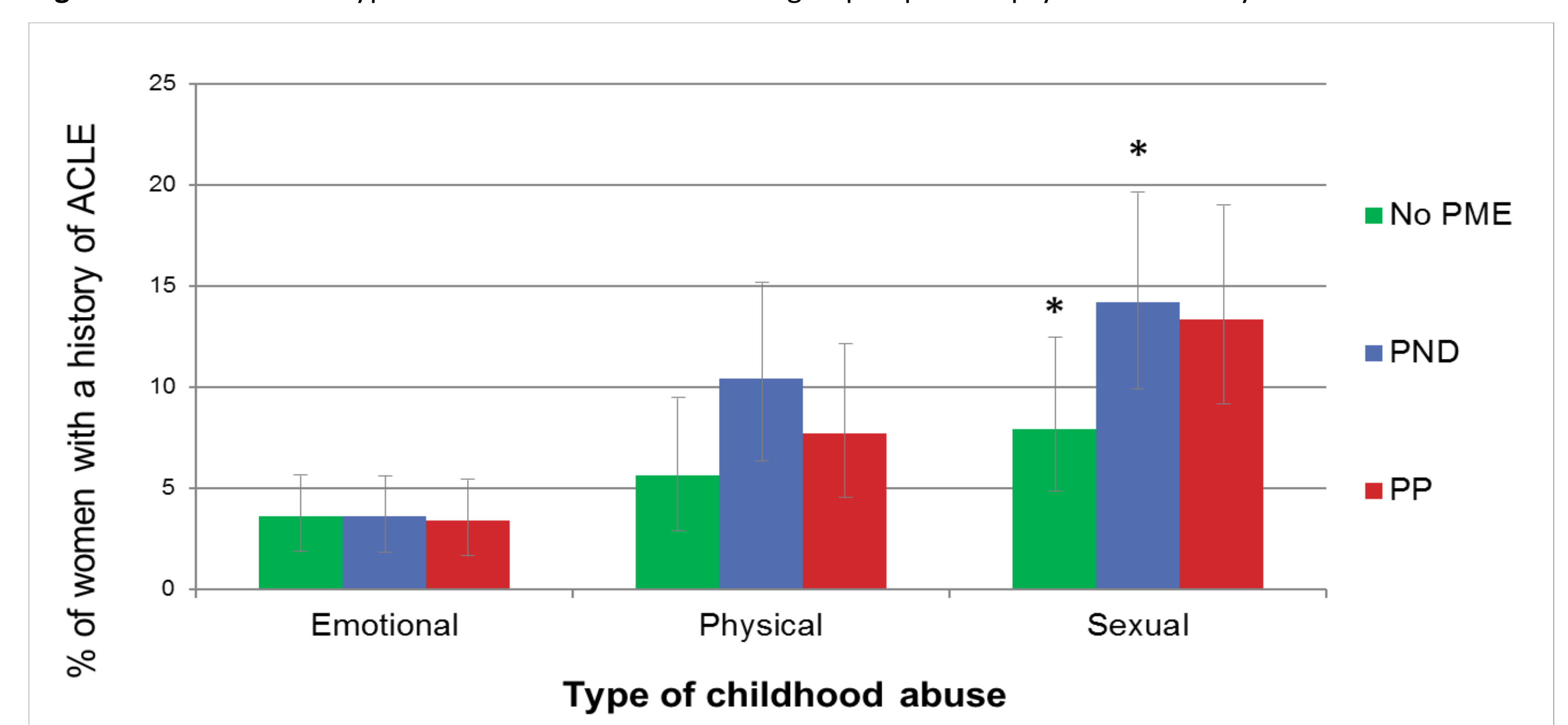
Figure 2. Prevalence of adverse childhood life events according to postpartum psychiatric history.



No PME: women with no lifetime history of perinatal mood episode, PND: postnatal depression within 6 weeks of delivery, PP: postpartum psychosis within 6 weeks of delivery. *Indicates significant difference $p < 0.05$. Error bars: 95 % CI

Significantly more women with PND experienced some form of childhood abuse than those in the No PME group ($p=0.019$, $OR=1.83$ 95% CI 1.10-3.03, **Figure 2**). Specifically, women with a history of childhood sexual abuse were almost twice as likely to experience PND compared with those who were not sexually abused ($p=0.039$, $OR=1.921$ 95% CI 1.049-1.69, **Figure 3**). We did not find any significant association between ACLEs and the occurrence of PP.

Figure 3. Prevalence of type of childhood abuse according to postpartum psychiatric history.



No PME: women with no lifetime history of perinatal mood episode, PND: postnatal depression within 6 weeks of delivery, PP: postpartum psychosis within 6 weeks of delivery. *Indicates significant difference $p < 0.05$. Error bars: 95 % CI

Discussion

- Childhood abuse, specifically childhood sexual abuse was associated with the occurrence of PND in women with BD. We did not find this association in relation to PP, suggesting that the triggering of PP may be more heavily dependent on biological factors.
- Due to the cross-sectional study design, a causal relationship between childhood abuse and PND could not be inferred. Future research should aim to assess ACLEs as risk factors for postpartum mood episodes prospectively in women with BD.

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